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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,669

03/15/2005

Kiyokazu Tanaka

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GRIFFIN & SZIPL, PC

SUITE PH-1

2300 NINTH STREET, SOUTH

ARLINGTON, VA 22204

EXAMINER

THEODORE, MAGALI P

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

06/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,669	Applicant(s) TANAKA, KIYOKAZU	
	Examiner Magali P. Théodore	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/15/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 5-15 and 20-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/3/2004, 3/15/2005, 6/9/2005, 7/16/2007, 7/16/2007</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 5-15 and 20-24 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-15 and 20-24 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu (CN 1317283). All references to Wu in this action are to the translation provided.

Regarding claim 1, Wu discloses a method for producing biodegradable chopsticks by mixing wood powder or bamboo powder (p 3 last line), a binder made of starch powder and gum powder, and water (p 3 ¶ 3) to form a molding material and then molding it (p 4 ¶ 1 ln 4).

Regarding claim 16, Wu discloses a biodegradable molding material comprising wood powder or bamboo powder (p 3 last line), a binder made of starch powder and gum powder, and water (p 3 ¶ 3) all mixed together (p 4 ¶ 1 ln 4).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 2-4 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu.

Regarding claim 2, Wu discloses a method for producing biodegradable chopsticks by mixing wood powder or bamboo powder (p 3 last line), a binder made of starch powder and gum powder, and water (p 3 ¶ 3) to form a molding material and then molding it (p 4 ¶ 1 ln 4). Wu discloses that the plant powder accounts for 50 % to 70 % of the mixture's weight, the binder powder (starch plus edible gum) for 18 % to 50 % (p 3 ¶ 3). The ratio by weight of plant powder to binder powder then is 1-4 to 1. The values between 2:1 and 4:1 fall within those recited by the claim, 2-17:1. Wu does not disclose a ratio by weight of dry ingredients to water of 3-9:1. However, Wu establishes

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the ratio of water dry ingredients to water as a result-effective parameter by specifying a water content of 0 - 0.5 % (p 3 ¶ 3). Therefore, it would be obvious to an ordinary artisan to optimize the mixture's water content according to the specific application because Wu teaches that the water content must be controlled. Optimizing a result-effective parameter known in the art does not impart patentable distinction to an invention. See MPEP 2144.05 [R-5] II, *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 3-4, Wu discloses that the plant binder powder is a mixture of starch powder and gum powder (p 3 ¶ 3).

Regarding claims 17, Wu discloses that the plant powder accounts for 50 % to 70 % of the mixture's weight, the binder powder (starch plus edible gum) for 18 % to 50 % (p 3 ¶ 3). The weight of the binder powder is 1/4 to 1 time the weight of the plant fiber powder. The factors between 1/4 and 1/2 fall within the range of 1/7 to 1/2 recited by the claim. Wu does not disclose a water content of 10-25 %. However, Wu establishes the ratio of water dry ingredients to water as a result-effective ¶meter by specifying a water content of 0 - 0.5 % (p 3 ¶ 3). Therefore, it would be obvious to an ordinary artisan to optimize the mixture's water content according to the specific application because Wu teaches that the water content must be controlled. Optimizing a result-effective parameter known in the art does not impart patentable distinction to an invention. See MPEP 2144.05 [R-5] II, *in re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 18-19, Wu discloses that the plant binder powder is a mixture of a starch powder and a gum powder (p 3 ¶ 3).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magali P. Théodore whose telephone number is (571) 270-3960. The examiner can normally be reached on Monday through Friday 9:00 a.m. to 5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Magali P. Théodore/

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Examiner, Art Unit 1791

/Christina Johnson/

Supervisory Patent Examiner, Art Unit 1791